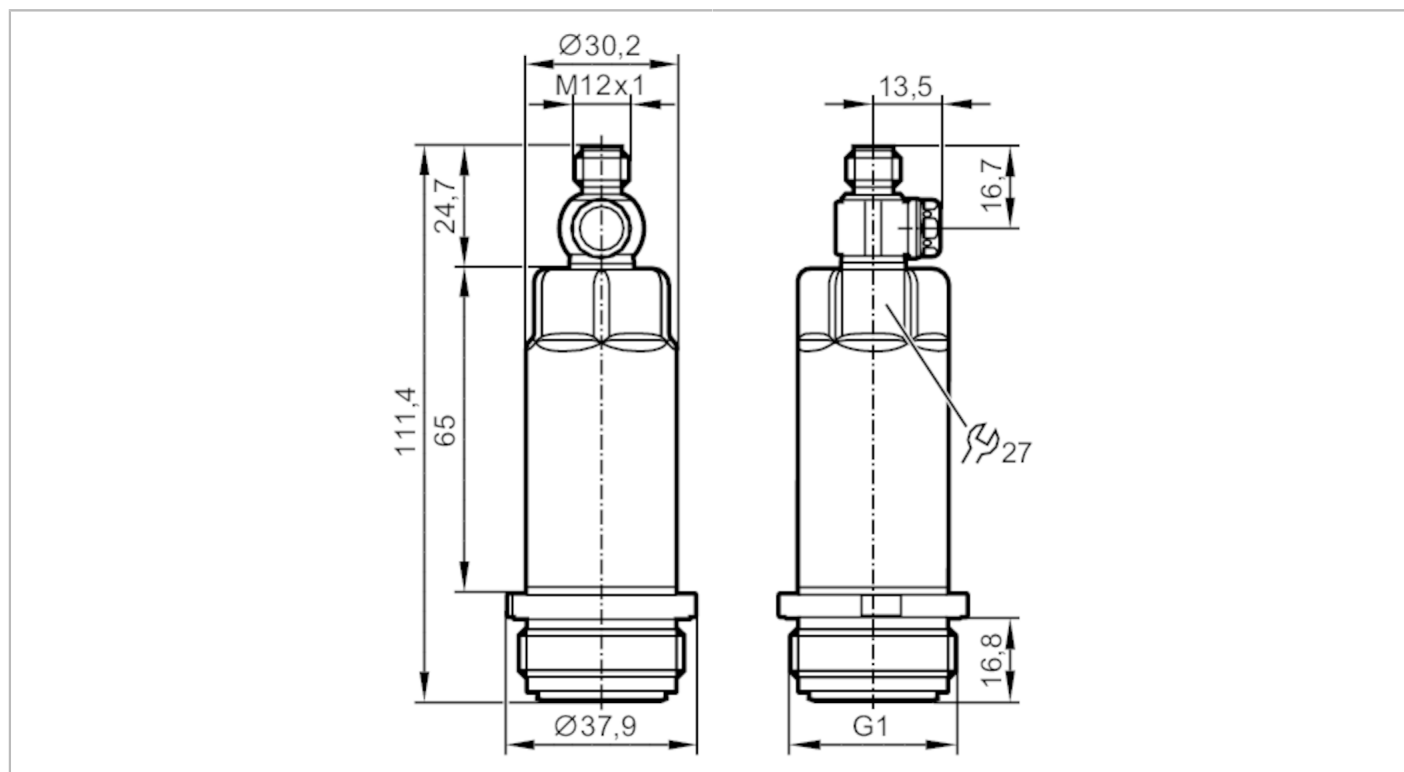


PM1714



Flush pressure transmitter

PM-016-REA01-E-ZVG/US



ACS



CRN



EC 1935/2004

EHDG Certified

FCM



IO-Link

Reg31



UK

CA

Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1		
Measuring range	-1...16 bar	-14.6...232 psi	-0.1...1.6 MPa
Process connection	threaded connection G 1 external thread Aseptoflex Vario		

Application

Special feature	Gold-plated contacts		
Measuring element	ceramic-capacitive pressure measuring cell		
Temperature monitoring	no		
Application	flush mountable for the food and beverage industry		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...125; (150 max. 1h)		
Min. bursting pressure	250 bar	3625 psi	25 MPa
Pressure rating	75 bar	1085 psi	7.5 MPa
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure; vacuum		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	60		

Electrical data

Operating voltage [V]	18...30 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		



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Integrated watchdog	yes		
2-wire			
Current consumption	[mA]	3.5...21.5	
Power-on delay time	[s]	1	
3-wire			
Current consumption	[mA]	< 45	
Power-on delay time	[s]	0.5	
Inputs / outputs			
Number of inputs and outputs	Number of analogue outputs: 1		
Outputs			
Total number of outputs	2		
Output signal	analogue signal; IO-Link; (configurable)		
Number of analogue outputs	1		
Analogue current output	[mA]	4...20; (scalable)	
Max. load	[Ω]	700; (Ub = 24 V; (Ub - 9 V) / 21.5 mA)	
Short-circuit proof	yes		
Overload protection	yes		
Measuring/setting range			
Measuring range	-1...16 bar	-14.6...232 psi	-0.1...1.6 MPa
Analogue start point	-1...12.8 bar	-14.6...185.6 psi	-0.1...1.28 MPa
Analogue end point	2.2...16 bar	32...232 psi	0.22...1.6 MPa
In steps of	0.01 bar	0.2 psi	0.001 MPa
Factory setting		ASP = 0.0 bar	AEP = 16.0 bar
Accuracy / deviations			
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,2; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)	
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)	
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,05; (0...70 °C)	
Temperature coefficient span	[% of the span / 10 K]	< ± 0,15; (0...70 °C)	
Response times			
Damping for the analogue output dAA	[s]	0...4	
2-wire			
Step response time analogue output	[ms]	30	

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3-wire

Step response time analogue output [ms]

7

Interfaces

Communication interface

IO-Link

Transmission type

COM2 (38,4 kBaud)

IO-Link revision

1.1

Profiles

Digital Measuring Sensor (0x000A), Identification and Diagnosis (0x4000)

SIO mode

no

Required master port type

A

Process data analogue

3

Min. process cycle time [ms]

3.2

Supported DeviceIDs

Type of operation

DeviceID

default

661

Operating conditions

Ambient temperature [°C]

-25...80

Storage temperature [°C]

-40...100

Protection

IP 67; IP 68; IP 69K

Tests / approvals

EMC

DIN EN 61000-6-2

DIN EN 61000-6-3

Shock resistance

DIN EN 60068-2-27

50 g (11 ms)

Vibration resistance

DIN EN 60068-2-6

20 g (10...2000 Hz)

MTTF [years]

323

Note on approval

factory certificate available as download at www.factory-certificate.ifm

UL approval

UL Approval no.

J021

Mechanical data

Weight [g]

308.3

Materials

stainless steel (1.4404 / 316L); PBT

Materials (wetted parts)

ceramics (99.9 % Al₂O₃); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PTFE

Min. pressure cycles

100 million

Tightening torque [Nm]

35

Process connection

threaded connection G 1 external thread Aseptoflex Vario

Remarks

Pack quantity

1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



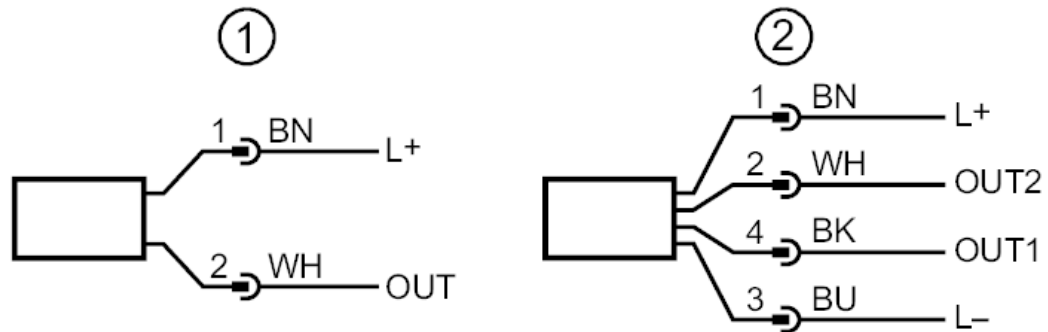
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Connection



- 1 connection for 2-wire operation (analogue)
- 2 connection for 3-wire operation (analogue / IO-Link)
OUT1 : IO-Link
OUT2 : analogue output